



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR
THIRD YEAR FIRST SEMESTER**

**SCHOOL OF EDUCATION
BACHELOR OF EDUCATION**

**COURSE CODE: ECDE 313
COURSE TITLE: METHODS OF TEACHING
MATHEMATIC ACTIVITIES**

DATE: 18TH APRIL, 2018

TIME: 0830 - 1030HRS

INSTRUCTIONS TO CANDIDATE

Attempt question 1 (ONE) and any other 2 (TWO) questions

SECTION A

- a. Using examples explain the following terms as used in mathematics
- i. physical knowledge
 - ii. social knowledge
 - iii. logical mathematical knowledge
- (6mks)**
- b. Name two methods of constructing numbers according to Piaget. Give examples for each method. **(4mks)**
- c. Explain each of the two methods used by Piaget in number construction. **(4mks)**
- d. Define a 'number' according to Piaget? **(2mks)**
2. a) List four (4) objectives of teaching mathematics to children. **(4mks)**
- b) Describe the various methods that teachers can use to help children identify different types of balls in a topic 'classification' in mathematics. **(6mks)**
- c) Using an example, describe how children conserve length in measurement. **(4 mks)**

SECTION B

3. a) Explain the activities you can give to children when teaching about:
- i. Area
 - ii. Weight
 - iii. Volume
 - iv. Time
- (8mks)**
- b. Describe the meaning of pre - number activities for preschoolers. **(2mks)**
- c. Name and explain three types of pre- number activities **(6mks)**
- d. Explain the importance of:-
- i. Meaning or actual counting. **(2mks)**
 - ii. Meaning of conservation. **(2mks)**
4. a). Draw a detailed lesson plan to show how you can teach "number writing 1-10" **(10mks)**
- b) Children develop the concept of time in stages. Explain the three stages, using elaborate examples and activities. **(6 mks)**
- c) Outline various activities for
- i. Matching and comparing
 - ii. Ordering activities
 - iii. Counting activities
 - iv. Volume
- (4mks)**
5. a) Describe the activities you can give children when teaching about shape **(10 mks)**
- b) You have been requested by an ECD officer to give a talk on 'mathematics for young children'. What would you consider? **(10 mks)**

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